



Certificate of Compliance

Certificate: 80194024

Master Contract: 304329

Project: 80219190

Date Issued: 2024-10-29

Issued to: PT LESSO NEW ENERGY

Kawasan Industri JIPS blok D Jalan Raya Semarang - Demak KM 14.7 Desa/Kelurahan, Batu,
Kec.Karangtengah,kab.Demak Demak Regency, Jawa Tengah 59561 Indonesia

Attention: Mr Che

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only



Issued by: *Sara Guo*
Sara Guo

PRODUCTS

CLASS 5311 10 - POWER SUPPLIES - Photovoltaic Modules and Panels

CLASS 5311 90 - POWER SUPPLIES - Photovoltaic Modules and Panels - Certified to U.S. Standards

Photovoltaic modules with Fire Performance (USA) Type 29, maximum system voltage of 1500 V dc, model series: xxxC(HBD)72(182) (xxx=555-585 in steps of 5), Fuse rating 30A.

Photovoltaic modules with Fire Performance (USA) Type 29, maximum system voltage of 1500 V dc, model series: xxxC(HBD)66(182) (xxx=510-535 in steps of 5), Fuse rating 30A.

Photovoltaic modules with Fire Performance (USA) Type 29, maximum system voltage of 1500 V dc, model series: xxxC(HBD)60(182) (xxx=465-485 in steps of 5), Fuse rating 30A.

Photovoltaic modules with Fire Performance (USA) Type 29, maximum system voltage of 1500 V dc, model series: xxxC(HBD)54(182) (xxx=415-435 in steps of 5), Fuse rating 30A.

Photovoltaic modules with Fire Performance (USA) Type 1, maximum system voltage of 1500 V dc, model series: xxxC(HBB)54(182) (xxx = 435 to 410, in steps of 5), Fuse rating 30A

Notes:

1. The electrical characteristics are within ± 4 percent of the rated values of I_{sc} , ± 3 percent of the rated values of V_{oc} and P_{max} under standard test conditions (irradiance of 1000 W/m², AM 1.5 spectrum, and a cell temperature of 25°C (77°F)).
2. The operating ambient temperature of these devices may exceed 40 °C at full load for all wire sizes if it is determined suitable in the field use application.



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STC condition					
Model	Open Circuit Voltage at STC (V dc)	Short Circuit Current at STC (A dc)	Rated Voltage at STC (V dc)	Rated Current at STC (A dc)	Rated Maximum Power at STC (Watts)
xxxC(HBD)72(182) (xxx=555-585 in steps of 5)					
585C(HBD)72(182)	52.62	14.39	42.89	13.64	585
580C(HBD)72(182)	52.42	14.33	42.75	13.57	580
575C(HBD)72(182)	52.22	14.27	42.60	13.50	575
570C(HBD)72(182)	52.02	14.21	42.45	13.43	570
565C(HBD)72(182)	51.82	14.15	42.30	13.36	565
560C(HBD)72(182)	51.62	14.09	42.11	13.30	560
555C(HBD)72(182)	51.42	14.03	41.92	13.24	555
xxxC(HBD)66(182) (xxx=510-535 in steps of 5)					
535C(HBD)66(182)	48.24	14.55	39.29	13.62	535
530C(HBD)66(182)	48.05	14.49	39.09	13.56	530
525C(HBD)66(182)	47.87	14.43	38.89	13.50	525
520C(HBD)66(182)	47.69	14.37	38.70	13.44	520
515C(HBD)66(182)	47.50	14.31	38.50	13.38	515
510C(HBD)66(182)	47.32	14.25	38.29	13.32	510
xxxC(HBD)60(182) (xxx=465-485 in steps of 5)					
485C(HBD)60(182)	43.68	14.67	35.69	13.59	485
480C(HBD)60(182)	43.52	14.61	35.48	13.53	480
475C(HBD)60(182)	43.35	14.55	35.27	13.47	475
470C(HBD)60(182)	43.18	14.49	35.05	13.41	470
465C(HBD)60(182)	43.02	14.43	34.84	13.35	465
xxxC(HBD)54(182) (xxx=415-435 in steps of 5)					
435C(HBD)54(182)	39.17	14.79	32.11	13.55	435
430C(HBD)54(182)	39.02	14.73	31.88	13.49	430
425C(HBD)54(182)	38.87	14.67	31.65	13.43	425
420C(HBD)54(182)	38.72	14.61	31.42	13.37	420
415C(HBD)54(182)	38.57	14.55	31.18	13.31	415
xxxC(HBB)54(182) (xxx = 435 to 410 in steps of 5)					
435C(HBB)54(182)	40.28	14.88	31.92	13.63	435
430C(HBB)54(182)	40.13	14.82	31.69	13.57	430
425C(HBB)54(182)	39.98	14.76	31.46	13.51	425
420C(HBB)54(182)	39.83	14.70	31.23	13.45	420
415C(HBB)54(182)	39.68	14.64	31.00	13.39	415
410C(HBB)54(182)	39.53	14.58	30.77	13.33	410



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BNPI condition					
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xxxC(HBD)72(182) (xxx=555-585 in steps of 5)					
585C(HBD)72(182)	52.61	15.89	42.98	15.02	645
580C(HBD)72(182)	52.41	15.82	42.84	14.94	639
575C(HBD)72(182)	52.21	15.75	42.69	14.86	634
570C(HBD)72(182)	52.01	15.69	42.53	14.79	628
565C(HBD)72(182)	51.81	15.62	42.38	14.71	623
560C(HBD)72(182)	51.61	15.56	42.19	14.64	617
555C(HBD)72(182)	51.41	15.49	42.00	14.58	612
xxxC(HBD)66(182) (xxx=510-535 in steps of 5)					
535C(HBD)66(182)	48.23	16.06	39.37	15.00	590
530C(HBD)66(182)	48.04	16.00	39.17	14.93	584
525C(HBD)66(182)	47.86	15.93	38.97	14.86	579
520C(HBD)66(182)	47.68	15.86	38.78	14.80	573
515C(HBD)66(182)	47.49	15.80	38.58	14.73	568
510C(HBD)66(182)	47.31	15.73	38.37	14.67	562
xxxC(HBD)60(182) (xxx=465-485 in steps of 5)					
485C(HBD)60(182)	43.67	16.20	35.76	14.96	535
480C(HBD)60(182)	43.51	16.13	35.55	14.90	529
475C(HBD)60(182)	43.34	16.06	35.34	14.83	524
470C(HBD)60(182)	43.17	16.00	35.12	14.76	518
465C(HBD)60(182)	43.01	15.93	34.91	14.70	513
xxxC(HBD)54(182) (xxx=415-435 in steps of 5)					
435C(HBD)54(182)	39.16	16.33	32.17	14.92	479
430C(HBD)54(182)	39.01	16.26	31.94	14.85	474
425C(HBD)54(182)	38.86	16.20	31.71	14.79	468
420C(HBD)54(182)	38.71	16.13	31.48	14.72	463
415C(HBD)54(182)	38.56	16.06	31.24	14.65	457
xxxC(HBB)54(182) (xxx = 435 to 410 in steps of 5)					
435C(HBB)54(182)	40.35	16.43	31.96	14.78	472
430C(HBB)54(182)	40.20	16.36	31.73	14.72	467
425C(HBB)54(182)	40.05	16.30	31.49	14.65	461
420C(HBB)54(182)	39.90	16.23	31.26	14.59	456
415C(HBB)54(182)	39.75	16.16	31.02	14.52	450
410C(HBB)54(182)	39.60	16.10	30.80	14.46	445

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APPLICABLE REQUIREMENTS

CSA C22.2 No. 61730-1:19 Photovoltaic (PV) module safety qualification — Part 1: Requirements for construction, 2019-12.

CSA C22.2 No. 61730-2:19 Photovoltaic (PV) module safety qualification — Part 2: Requirements for testing, 2019-12.

UL 61730-1 2nd: Photovoltaic (PV) Module Safety Qualification – Part 1: Requirements for Construction, 2022-10-28.

UL 61730-2 2nd: Photovoltaic (PV) Module Safety Qualification – Part 2: Requirements for Testing, 2022-10-28, reprint 2023-10-10.

UL 61215-1 2nd: Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 1: Test requirements, 2021-07-28

UL 61215-1-1 2nd: Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 1-1: Special requirements for testing of crystalline silicon photovoltaic (PV) modules, 2021-07-28

UL 61215-2 2nd, Terrestrial photovoltaic (PV) modules – Design qualification and type approval – Part 2: Test procedures, 2021-07-28

Notes:

Products certified under Class C531110 have been certified under CSA’s ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

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*The products listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

Project	Date	Description
80219190	2024-10-29	Update report 80194024 to add new series xxxC(HBB)54(182) (xxx = 435 to 410, in steps of 5) with new BOM materials.
80194024	2024-08-02	Original certificate for double glass type modules.